

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/743,284		12/23/2003	Joong Seo Park	YHK-0112	YHK-0112 7858	
34610	7590	04/20/2006		EXAMINER		
FLESHNE	ER & KIM	1, LLP	A, MINH D			
P.O. BOX 221200 CHANTILLY, VA 20153				ART UNIT	PAPER NUMBER	
				2821		
				DATE MAILED: 04/20/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

•\	<u>*</u>						
	•	Application No.	Applicant(s)				
		10/743,284	PARK, JOONG SEO				
	Office Action Summary	Examiner	Art Unit				
		Minh D A	2821				
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover shee	et with the correspondence address	;			
A SH THE - Exte after - If th - If NO - Failu Any	HORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. ensions of time may be available under the provisions of 37 CFR 1. If SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a rep of period for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by statut reply received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, many within the statutory minimum of will expire SIX (6) te, cause the application to become	ay a reply be timely filed  of thirty (30) days will be considered timely.  MONTHS from the mailing date of this communione ABANDONED (35 U.S.C. § 133).	ication.			
Status							
1)⊠	Responsive to communication(s) filed on 25 J	lanuary 2006.					
•=		s action is non-final.					
3)□	,—		natters, prosecution as to the meri	its is			
,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)□ 6)⊠ 7)⊠	Claim(s) <u>1-15</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) <u>1-3 and 12-15</u> is/are rejected. Claim(s) <u>4-11</u> is/are objected to. Claim(s) are subject to restriction and/o	awn from consideration.					
Applicat	ion Papers		•				
9)[	The specification is objected to by the Examine	er.					
10)	The drawing(s) filed on is/are: a) acc	cepted or b) dojected	to by the Examiner.				
	Applicant may not request that any objection to the	e drawing(s) be held in abo	yance. See 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correct	·	-··· ,				
11)	The oath or declaration is objected to by the E	xaminer. Note the attac	hed Office Action or form PTO-15	2.			
Priority (	under 35 U.S.C. § 119						
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority document  2. Certified copies of the priority document  3. Copies of the certified copies of the priority document  application from the International Burea  See the attached detailed Office action for a list	ts have been received. ts have been received brity documents have be tu (PCT Rule 17.2(a)).	in Application No een received in this National Stage	<b>3</b>			
Attachmen	nt(s)						
	ce of References Cited (PTO-892)		ew Summary (PTO-413)				
3) 🔲 Infon	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date		No(s)/Mail Date of Informal Patent Application (PTO-152)				

Application/Control Number: 10/743,284

Art Unit: 2821

### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-3, 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Moon (US 6,175,192).

Regarding claim 1, Moon discloses an apparatus and method for driving plasma display panel comprising: a first path for charging an inductor using energy from a source capacitor Cp; second path, being separated from the source capacitor (Cp), for supplying energy of the inductor the plasma display panel. See figures 2-3D, col.2, lines [0022] to col.3, lines [0035] to lines [0044].

Regarding claim 2, Moon discloses a third path for charging a voltage from sustain voltage source into the panel; a fourth path for recovering energy charged the panel to charge the recovered energy, via the inductor, into the source capacitor; and a fifth path for charging a voltage from a ground voltage source (Vs02) into the panel. See figure 1-3D.

Regarding claim 3, Moon discloses wherein the first path includes: a first switching device connected between a second terminal of the source capacitor (Cp)

Application/Control Number: 10/743,284

Art Unit: 2821

connected to a ground voltage source and a first terminal of the inductor (L1); and a second switching device connected between a second terminal of the inductor (L2) and the ground voltage source. See figure 2-3C.

Regarding claim 12, Moon discloses a plasma display panel, comprising the steps of: (A) charging energy from a source capacitor (Cp) into an inductor using a first path including the source capacitor (Cp) and the inductor and (B) applying energy of the inductor (L) the panel using a second path that is separated from the source capacitor (C) and includes the inductor (L) and the plasma display panel. See figures 2-3D, col.2, lines [0022] to col.3, lines [0035] to lines [0044].

Regarding claim 13, Moon discloses a charging a voltage from a sustain voltage source into the panel using a third path including the sustain voltage source and the panel; the recovered energy into the source capacitor using a fourth path including the panel, the inductor and the source capacitor; (D) recovering energy charged in the panel to charge the recovered energy into the source capacitor using fourth path including the panel, the inductor and the source capacitor; and (E) charging a voltage from the ground voltage source into the panel using a fifth path including the ground voltage source and the panel. See figures 2-3D, col.2, lines [0022] to col.3, lines [0035] to lines [0044].

Regarding claims 14-15, Moon discloses the energy recovering method as claimed wherein said (A) step includes: charging energy from the source capacitor into the inductor through the first path; and shutting off the first path in a state in which

Application/Control Number: 10/743,284

Art Unit: 2821

energy has been charged the inductor to thereby derive an inverse voltage into the inductor. See figures 2-3D.

# Allowable Subject Matter

3. Claims 4-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach that, wherein the first and second switching devices keep a turned-on state during a period when energy from the source capacitor is charged in the inductor through the first path, and shut off the first path in a state in which energy has been charged in the inductor to thereby derive an inverse voltage into the inductor in recited in dependent claim 4.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Walters et al (US 5,895,986) and Yamashita et al. (US 6,087,776) are cited to show a lighting control system.

#### Inquiry

Any inquiry concerning this communication or earlier communications from

Application/Control Number: 10/743,284 Page 5

Art Unit: 2821

the examiner should be directed to Minh Dieu A whose telephone number is (571)

272-1817. The examiner can normally be reached on M-F (5:30 AM-2:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business

Examiner

Center (EBC) at 866-217-9197 (toll-free).

Minh A

Art Unit 2821

4/17/06

WILSON LEE PRIMARY EXAMINER